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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,186	10/09/2003	Kenta Cho	243406US2TTCRD CONT	7866
22850	7590	05/02/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HOANG, PHUONG N	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/681,186	<b>Applicant(s)</b> CHO ET AL.	
	<b>Examiner</b> Phuong N. Hoang	<b>Art Unit</b> 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 26 - 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26,35 and 44 is/are rejected.
- 7) ☐ Claim(s) 27 - 34, and 36 - 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/9/03.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER

## DETAILED ACTION

1. Claims 26 – 44 are pending for examination.

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 26, 35, and 44 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 13, and 25 of U.S. Patent No. 6,708,225 (herein refers as 225). Although the conflicting claims are not identical, they are not patentably distinct from each other because both computer systems comprise substantially the same elements. The differences between the patent no. 225 and this case is the claimed external communication units including an agent activation

Art Unit: 2194

unit, configured to communicate with the different type agent system. It would have been obvious to one of ordinary skill in the art to recognize that once different types of agents system communicate, the activation is needed when executing the agents to enable the communication to each other.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 26, 35, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins, "Multiagent Planning Architecture", MPA version 1.2 (pages 1 – 83) in view of Lange, US patent no. 6,163,794.**

6. **As to claim 26**, WILKINS teaches An agent system for processing information by an agent having agent state data, the agent system as an original agent system being connected to a different type agent system through a network, comprising (MPA Infrastructure, section 3):

a wrapper class memory (wrappers and agent libraries, section 3 – 3.1.1)  
configured to store component data of wrappers;

a movement request detector (2.1 and 3.2) configured to detect a request for the agent to move to the different type agent system from the agent state data;

a wrapper generator (LISP wrapper, 3.1.1) configured to generate, in response to the request, a wrapper corresponding to a type of the different type agent (MPA is written in different languages) system based on the component data of the type stored in said wrapper class memory; and

external communication unit (external agents, 2.1) including an agent activation unit, configured to communicate with the different type agent system,

wherein, the wrapper generates a wrapped agent (agent wrapper and Lisp wrapper, 3.1 – 3.1.2) based on a component of the wrapper in the different type agent system and supplies the agent state data to the wrapped agent through said external communication unit,

said agent activation unit (inherent when running agent wrapper) activates the wrapped agent in the different type agent system, the wrapped agent executes the agent state (state, section 4) data to use resources (resources, section 4) in the different type agent system, and

the agent continually executes (inherent) the agent state data based on the execution result of the wrapped agent in the original agent system.

While WILKINS teaches the wrapper for every types of agents (3 - 3.1.1). WILKINS silents on the wrappers corresponding to each type of other agent systems.

Lange teaches the wrappers corresponding to each type of other agent systems (service wrapper 26, figure 1 and associated text).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lange to WILKINS's system because it would be more <sup>organized so</sup> ~~organize~~ that each wrapper corresponding to each type of agent system and ensure that wrappers can provide enough services for sufficient agents concurrently run in the system. w

7. **As to claim 35**, this is the method claim of claim 1. See rejection for claim 1 above.

8. **As to claim 44**, this is the product claim of claim 1. See rejection for claim 1 above.

***Allowable Subject Matter***

9. Claims 27 – 34 and 36 – 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reason for Allowance***

10. The following is an examiner's statement of reasons for allowance:

11. The prior art does not expressly teach or render obvious the invention as recited in dependent claims 27 and 36.

Art Unit: 2194

12. WILKINS in view of Lange does not expressly teach or render the steps of same type node data memory configured to store node data representing nodes included in agent systems of the same type as the original agent system and other agent systems of different type discriminately; different type node data memory configured to store access data for each node included in the other agent systems; and correspondence table configured to store correspondence data between each category of movement commands and each type of the other agent systems, when taken in the context of claims as a whole. Moreover, evidence for the modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claims 27 and 36.

### ***Conclusion***

13. The prior art made of record but not relied upon request is considered to be pertinent to applicant's disclosure.

Cheyen, US patent no. 6,851,115, demonstrating wrapper wrapping different types of agent systems.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

Art Unit: 2194

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ph  
April 28, 2006

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER